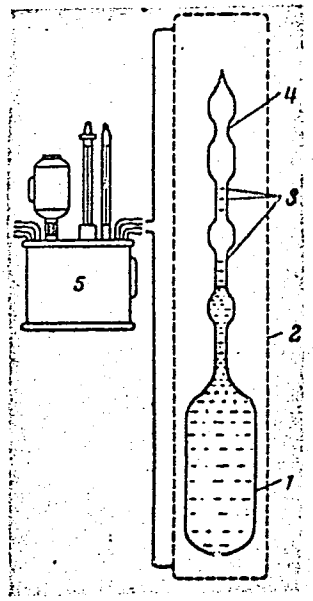
"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

S/078/63/008/004/003/013
A059/A126

Density, viscosity, and surface tension of ....

Figure 1: Pycnometer for the determination of the density of chlorides: 1 - pycnometer; 2 - constant temperature jacket; 3 - marks; 4 - place of opening of the pycnometer; 5 - Hoeppler thermostat.



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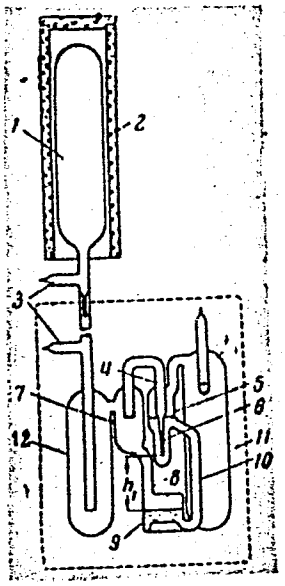
APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

S/078/63/008/004/003/013
A059/A126

Density, viscosity, and surface tension of ....

Figure 3: Improved gas setup for the determination of the surface tension: 1 - gas cylinder; 2 - electric furnace; 3 - tube of the apparatus for liquid and gas filling; 4, 8, 10 - connecting pipe; 5 - container for tube calibration; 6 - calibrated tube; 7 - intermediate cylinder; 9 - pressure-gauge cylinder; 11 - cushioning cylinder; 12 - trap.



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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

IVANOV-EMIN, B.N.; NISEL'SON, L.A.; SOKOLOVA, T.D.

Reactions of scandium chloride with ethylenediamine. Zhur. neorg. khim. 8 no.6:1381-1383 Je '63. (MIRA 16:6)

(Scandium chloride)
(Ethylenediamine)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

ACCESSION NR: AP4036963 S/0078/64/009/005/1049/1052

AUTHOR: Nisel'son, L. A.; Pustil'nik, A. I.; Sokolova, T. D.

TITLE: Orthobaric density and critical parameters of niobium and tantalum pentachlorides.

SOURCE: Zhurnal neorganicheskoy khimii, v. 9, no. 5, 1964, 1049-1052

TOPIC TAGS: niobium pentachloride, tantalum pentachloride, orthobaric density, critical parameter, critical density, critical pressure, critical temperature, niobium tantalum analysis, density temperature relationship, Berthelot equation, liquid vapor phase equilibrium, crystal liquid phase equilibrium

ABSTRACT: The orthobaric density of $NbCl_5$ and $TaCl_5$ throughout the liquid state and in the vapor state, and their critical parameters were determined (fig. 1). The densities of the liquid $TaCl_5$ and $NbCl_5$ and of their mixtures were measured precisely from their melting temperatures (216.2 and 204.2 C, respectively) to 300-320 C. The critical parameters for $NbCl_5$ were: critical temperature 534 C, density $_{crit}$ 0.68 gm/cm^3, pressure p_{crit} 46 atmospheres; for $TaCl_5$ were: 494 C, 0.89 gm/cm^3 and 43 atmospheres. Since the liquid-vapor phase and the crystal-

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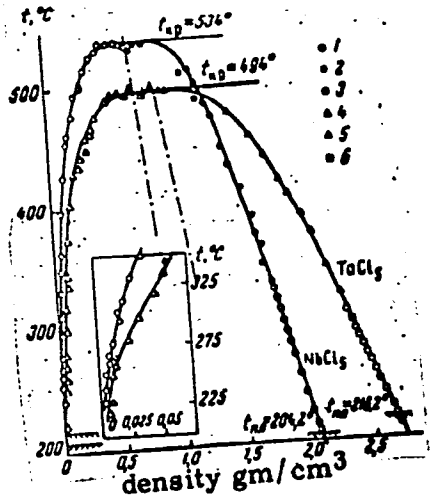
"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

ENCLOSURE: 01

ACCESSION NR: AP4036963

Fig. 1. Data for orthobaric density of $NbCl_5$ and $TaCl_5$.

1.--$NbCl_5$ (vapor); 2--$NbCl_5$ (liquid), data obtained in a small picnometer; 3--$NbCl_5$ (liquid), data obtained in large picnometer; 4--$TaCl_5$ (vapor); 5--$TaCl_5$ (liquid), data obtained in small picnometer; 6--$TaCl_5$ (liquid), data obtained in large picnometer.
t_{kp} = critical temperature
$t_{пл}$ = melting temperature



Card 3/3

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

NISEL'SON, L.A.; SOKOLOVA, T.D.

Orthobaric densities and the critical parameters of the niobium and tantalum pentabromides. Zhur. neorg. khim. 9 no.9:2066-2067 S '64. (MIRA 17:11)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoy promyshlennosti.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

NISEL'SON, L.A.; PUSTIL'NIK, A.I.; SOKOLOVA, T.D.

Orthobaric densities and critical parameters of niobium and tantalum pentachlorides. Zhur. neorg. khim. 9 no.5: 1049-1052 My '64. (MIRA 17:9)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 29547-65 EWT(m)

ACCESSION NR: AP5002796 S/0078/65/010/001/0018/0021

AUTHOR: Nisel'son, L. A.; Sokolova, T. D.

TITLE: Orthobaric density, critical parameters, and viscosity of $MoCl_5$ and WCl_6

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 1, 1965, 18-21

TOPIC TAGS: molybdenum pentachloride, tungsten hexachloride, orthobaric density, density, viscosity, melting point, pressure, critical temperature

ABSTRACT: This study of MoCl and WCl was carried out in order to determine the thermophysical properties of the compounds in the liquid and vaporous state, inasmuch as this knowledge is necessary for developing processes for the manufacture, separation, and reduction of higher molybdenum and tungsten chlorides. The purest fractions obtained after chlorination and purification of the molybdenum and tungsten chlorides were used for the investigation. The orthobaric density was determined for the entire temperature range of the liquid state. The density at temperatures ranging from the melting point to 400--440C was obtained with the greatest accuracy by the method of least squares and is represented by formulas. The critical parameters were determined from orthobaric density data. The viscosity was deter-

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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 29547-65

ACCESSION NR: AP5002796

mined at temperatures ranging from the melting point to 310--400C and the results are described by formulas. More exact melting points of pure MoCl and WCl were determined to be at 194.4C and 283C, respectively. Experimental results are given in tables 1, 2, and 3 of the Enclosure. The data given in this study are new and do not appear in the technical literature. Orig. art. has: 2 figures and 3 tables.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoy promyshlennosti "GIREDMET," Moscow (GIREDMET State Scientific Research and Planning Institute of the Rare Metal Industry)

SUBMITTED: 03Aug63 ENCL: 03 SUB CODE: IC, GC

NO REF SOV: 006 OTHER: 000

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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 29547-65

ENCLOSURE: 01

ACCESSION NR: AP5002796

$MoCl_5$

Vapor		Liquid	
t, C	ρ, g/cm^3	t, C	ρ, g/cm^3
277,0	0,00498	204,0*	2,1799
282,0	0,00516	222,5*	2,1358
317,0	0,012	241,0*	2,0951
351,3	0,0188	261,5*	2,0506
357,0	0,0208	282,5*	2,0101
388,0	0,0383	303,0*	1,9687
396,0	0,0396	321,0*	1,9354
408,6	0,0414	353,0*	1,8651
459,0	0,0864	381,7*	1,8031
474,5	0,1064	397,0*	1,7667
478,0	0,107	414,0**	1,724
488,4	0,134	422,0**	1,700
507,0	0,164	457,5**	1,600
510,5	0,166	497,5**	1,470
512,0	0,152	574,0**	0,774
533,0	0,23		
555,0	0,303		
562,0	0,35		
563,0	0,389		
567,5	0,516		
571,0	0,386		
574,0	0,614		
577,0	0,59		
578,0	0,62		
578,6	0,507		

WCl_6

Vapor		Liquid	
t, C	ρ, g/cm^3	t, C	ρ, g/cm^3
327,0	0,00444	281,5*	2,7268
364,0	0,0103	321,0*	2,6338
365,5	0,0108	353,0*	2,5811
392,0	0,0155	382,5*	2,5071
400,0	0,0182	410,0*	2,4401
406,0	0,0212	436,2*	2,3749
443,0	0,0388	478,0**	2,280
446,0	0,0356	484,5**	2,240
480,0	0,0598	526,5**	2,080
494,0	0,0793	565,5**	1,910
509,0	0,0969	588,5**	1,780
555,0	0,157	599,5**	1,694
557,0	0,177	650,0**	1,020
562,0	0,179	650,0**	0,066
577,5	0,215	650,0**	0,088
592,6	0,269		
622,0	0,430		
622,0	0,425		
623,0	0,539		
624,4	0,376		
645,0	0,590		
647,0	0,722		
648,0	0,764		
650,0	0,716		

Table 1. Density of liquid molybdenum pentachloride and tungsten hexachloride and of their saturated vapors

*Measurement results of high accuracy obtained with large pycnometer.

**Measurement results obtained with a small pycnometer.

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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 29547-65

ACCESSION NR: AP5002796 ENCLOSURE: 02

Table 2. Critical parameters and other properties of molybdenum pentachloride and tungsten hexachloride

Compound	Molecular weight, g	t_{melt}, C	t_{cr}, C	$t_{cr} - t_{melt}$, C	ρ_{cr}, g/cm^3	V_{cr}, cm^3/mol	P_{cr} (est.), atm*	ρ_{melt} for liquids, g/cm^3	Constants of Van Der Waals equation: a · 10^{-6} atm · cm^3/mol	Constants of Van Der Waals equation: b, cm^3/mol
$MoCl_5$	273,24	194,4	577,0	382,6	0,74	368,8	51,8	2,196	39,60	168,3
WCl_6	396,60	283,0	650,0	367,0	0,94	420,4	49,1	2,721	49,20	192,9

* Reference value calculated by the formula $P_{cr} = \frac{R \cdot T_{cr}}{C \cdot V_{cr} \cdot M}$ at C = 3.65

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 29547-65

ACCESSION NR: AP5002796 O ENCLOSURE: 03

Table 3. Viscosity of liquid molybdenum pentachloride and tungsten hexachloride

$MoCl_5$		WCl_6		$MoCl_5$		WCl_6	
t, °C	η, centipoise	t, °C	η, centipoise	t, °C	η, centipoise	t, °C	η, centipoise
210,5	0,856	285,5	1,193	276,0	0,564	342,3	0,882
221,0	0,790	290,5	1,161	289,5	0,525	351,5	0,814
230,5	0,732	308,7	1,042	311,5	0,479	370,7	0,742
240,5	0,687	309,8	1,051			385,7	0,693
252,5	0,621	320,5	0,972			400,5	0,650
264,0	0,599	333,0	0,908				

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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 43750-65 EWT(m)/EWP(b)/EWP(t) IJP(c) JD

ACCESSION NR: AP5008480 S/0078/65/010/003/0593/0595

AUTHOR: Nisel'son, L. A.; Mogucheva, V. V.; Sokolova, T. D.

TITLE: Critical parameters of phosphorus, arsenic, and antimony trichlorides

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 3, 1965, 592-595

TOPIC TAGS: antimony trichloride, arsenic trichloride, phosphorus trichloride, critical temperature, critical density, orthobaric density

ABSTRACT: This study has been carried out because the available data on the subject are disconnected and incomplete. Orthobaric density curves for $SbCl_3$, $AsCl_3$, and PCl_3 are plotted, and the critical temperatures and densities of the chlorides are determined from the density data. The experimental data are processed by the method of least squares and presented in the form of interpolated equations. Densities of the $SbCl_3$ liquid from melting point to 320C and of the $AsCl_3$ and PCl_3 liquids from 0 to 120-140C are measured with great accuracy. The results are given in Table 1 of the Enclosure. The experimental density results are, as a rule, in very good agreement with available data in the technical literature. The critical temperatures for $SbCl_3$ and PCl_3 are also in good agreement with the available data,

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 43750-65
ACCESSION NR: AP5008480

but are 25-30C higher for $AsCl_3$. Orig. art. has: 3 formulas, 2 figures, and 2 tables.

ASSOCIATION: Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoy promyshlennosti (State Design and Planning Scientific Research Institute of the Rare Metals Industry)

AUBMITTED: 010ct63 ENCL: 02 SUB CODE: IC

NO REF SOV: 005 OTHER: 010

Card 2/4

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 43750-65
ACCESSION NR: AP5008480

ENCLOSURE: 01

Table 1. Orthobaric densities of antimony, arsenic, and phosphorus trichlorides

$SbCl_3$				$AsCl_3$				PCl_3			
Vapor		Liquid		Vapor		Liquid		Vapor		Liquid	
Temperature, C	Density, g/cm³	Temperature, C	Density, g/cm³	Temperature C	Density, g/cm³	Temperature C	Density, g/cm³	Temperature, C	Density, g/cm³	Temperature, C	Density, g/cm³
192,4	0,00426	63,3*	2,7032	166,5	0,0144	8,0*	2,1878	98,0	0,0105	−9,5*	1,6258
237,6	0,0093	78,4*	2,6653	195,9	0,0238	32,5*	2,1344	121,6	0,0159	0,0*	1,6102
247,5	0,0115	944 *	2,6325	218,3	0,0352	34,8*	2,1288	125,5	0,0180	15,8*	1,5821
248,2	0,0108	123,1*	2,2663	243,0	0,0503	73,0*	2,0472	126,8	0,0191	27,5*	1,5597
259,3	0,0140	153,5*	2,4975	255,4	0,0603	75,5*	2,0413	146,1	0,0260	40,5*	1,5339
288,7	0,0225	182,7*	2,4281	275,5	0,0833	78,0*	2,0356	159,3	0,0337	54,6*	1,5091
296,3	0,0242	207,7*	2,3703	296,3	0,115	84,5*	2,0215	161,0	0,0350	66,7*	1,4853
309,0	0,0326	239,3*	2,2949	303,3	0,122	102,7*	1,9743	193,6	0,0598	79,3*	1,4602
316,7	0,0327	270,0*	2,2199	332,3	0,189	126,8*	1,9224	195,7	0,062	90,4*	1,4377
311,5	0,0301	297,5*	2,1468	353,2	0,272	128,5*	1,9185	236,1	0,121	102,5*	1,4134

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 43750-65

ACCESSION NR: AP5008480

ENCLOSURE: 02

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(Table 1 cont.)

325,5	0,0354	322,5	2,08	378,6	0,412	146,7*	1,8771	252,7	0,156	113,9*	1,3896
338,7	0,0419	346,9	2,04	378,5	0,484	148,8*	1,8710	266,0	0,203	140,0	1,34
344,5	0,0406	374,7	1,94	381,2	0,560	152,5	1,84	271,8	0,215	160,0	1,29
353,9	0,057	418,0	1,84	380,5	0,646	170,0	1,83	278,3	0,256	179,0	1,24
402,7	0,104	437,0	1,70			186,2	1,79	287,2	0,827	194,5	1,20
415,5	0,121	454,5	1,65			204,8	1,73	290,9	0,401	206,2	1,16
425,6	0,141	469,7	1,58			223,0	1,69	290,0	0,457	218,5	1,13
430,9	0,154	519,5	1,01			237,5	1,65	291,2	0,457	226,2	1,10
444,5	0,178	521,0	1,06			251,5	1,61			234,3	1,07
459,0	0,2095	522,8	1,10			264,0	1,57			241,0	1,06
471,3	0,236					296,8	1,46			247,0	1,02
512,9	0,444					319,5	1,38			251,5	1,00
515,7	0,441					337,5	1,29			254,0	0,99
519,3	0,555					348,0	1,23			290,0	0,55
521,5	0,705					353,0	1,20			289,5	0,60
522,8	0,792					381,2	0,80				
521,0	0,819					382,5	0,68				
519,3	0,856										

* The accurate density measurements were obtained in a pycnometer of large volume.

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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 59240-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD

ACCESSION NR: AP5015012 UR/0078/65/010/006/1297/1299
546.284'131 + 546.27'131

13
B

AUTHOR: Nisel'son, L.A.; Pugachevich, P.P.; Sokolova, T.D.; Bederdinov, R.A.

TITLE: Density, viscosity, and surface tension of silicon tetrachloride and trichlorosilane

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 6, 1965, 1297-1299

TOPIC TAGS: silicon tetrachloride, trichlorosilane, chloride density, chloride viscosity, chloride surface tension

ABSTRACT: The article continues a series of studies on the thermophysical properties of halides. Silicon tetrachloride and trichlorosilane are important source materials for the preparation of high-purity silicon. Data on their properties as reported in the literature are contradictory. In this report, the authors present the results of measurements of the density, viscosity, and surface tension of $SiCl_4$ and $SiHCl_3$ between zero C and a temperature slightly above their normal boiling points. The chlorides studied were thoroughly purified by chemical means and by distillation. Density was measured in quartz pycnometers, viscosity in a capillary viscometer, and surface tension by the method of maximum pressure in a bubble. All the measurements were carried out in sealed devices in order

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 59240-65

ACCESSION NR: AP5015012

to exclude the adverse effect of moisture. The data obtained are tabulated and illustrated with graphs; they were also treated by the method of least squares, and are expressed in the form of exponential interpolation equations. Orig. art. has: 2 figures and 6 tables.

ASSOCIATION: None

SUBMITTED: 03Aug63 ENCL: 00 SUB CODE: IC

NO REF SOV: 006 OTHER: 008

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Card 2/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 62589-65 EWT(m)/EWP(b)/EWP(t) Ps-4 IJP(c) JD/JG

ACCESSION NR: AP5018241 UR/0078/65/010/007/1516/1519
546.623'131+546.681.3'131

AUTHOR: Nisel'son, L. A.; Sokolova, T. D.

TITLE: Density, viscosity, and surface tension of aluminum and gallium trichloride

SOURCE: Zhurnal neorganicheskoy khimii, v. 10, no. 7, 1965, 1516-1519

TOPIC TAGS: aluminum chloride, gallium chloride, density, viscosity, surface tension

ABSTRACT: Pycnometric measurements of density yielded the following equations: $\rho_{Al_2Cl_6}=1.2841-2.32 \times 10^{-3}\Delta t - 2.36 \times 10^{-6}\Delta t^2$ g/cm^3 from t_{fus} = 192.5 to 256.0C, where $\Delta t = t - 192.5$C (mean square error $\Delta\rho_{sq} = 0.0006$), and $\rho_{Ga_2Cl_6} = 2.0546-1.985 \times 10^{-3}\Delta t - 1.44 \times 10^{-6}\Delta t^2$ g/cm^3 from t_{fus} = 78.0 to 240.0C, where $\Delta t = t - 78.0$C (mean square error $\Delta\rho_{sq} = 0.0013$). From the peaks of orthobaric curves, the critical temperatures (t_{cr}) were found; the critical densities were also determined. From viscometric data, the following equations were derived:

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APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 62589-65

ACCESSION NR: AP5018241

$\eta_{Al_2Cl_6} = 3.602 \times 10^{-1} - 2.899 \times 10^{-3} \Delta t + 1.232 \times 10^{-5} \Delta t^2$ poise from t_{fus} = 192.5 to 276.0C, where $\Delta t = t - 192.5C$ (means square error $\Delta\eta_{sq} = 0.002$), and

$\eta_{Ga_2Cl_6} = 1.768 - 2.22 \times 10^{-2} \Delta t + 1.47 \times 10^{-4} \Delta t^2 - 3.74 \times 10^{-7} \Delta t^3$ poise from t_{fus} = 78.0 to 247.0C, where $\Delta t = 7 - 78.0$ (mean square error $\Delta\eta_{sq} = 0.013$). The data obtained for the surface tension can be represented by the following equations:

$\sigma_{Al_2Cl_6} = 9.77 - 7.33 \times 10^{-2} \Delta t$ dyne/cm from t_{fus} = 192.5 to 285C, where $\Delta t = t - 192.5C$ (mean square error $\Delta\sigma_{sq} = 0.1$), and

$\sigma_{Ga_2Cl_6} = 25.9 - 1.0 \times 10^{-1} \Delta t + 8.7 \times 10^{-5} \Delta t^2$ dyne/cm from t_{fus} = 78.0 to 300.0C, where $\Delta t = t - 78.0C$ (mean square error $\Delta\sigma_{sq} = 0.3$). Orig. art. has: 3 figures, 6 formulas and 4 tables.

ASSOCIATION: None

SUBMITTED: 01Feb64 ENCL: 00 SUB CODE: IC

NO REF SOV: 007 OTHER: 004

Card 2/2

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

UNKOVSKIY, B.V.; MALINA, Yu.F.; SOKOLOVA, T.D.

Stereochemistry of acetylene synthesis. Part 4: Synthesis and spatial configuration of the geometric isomers of 1,2-dimethyl-4-ethynyl-4-piperidol and their derivatives. Zhur. org. khim. 1 no.4:699-706 Ap '65. (MIRA 18:11)

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

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NISEL'SON, L.A.; SOKOLOVA, T.D.

Orthobaric densities, critical parameters and viscosity of $MoCl_5$ and WCl_6. Zhur. neorg. khim. 10 no.1:18-21 Ja '65. (MIRA 18:11)

1. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoy promyshlennosti "GIREDMET", Moskva. Submitted Aug. 3, 1963.

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L 35859-66 EWT(m)/EWP(t)/ETI IJP(c) WW/JD/JG

ACC NR: AP6014898 (N) SOURCE CODE: UR/0076/65/039/012/3025/3032

AUTHOR: Nisel'son, L. A.; Stolyarov, V. I.; Sokolova, T. D.

ORG: Moscow State Scientific and Design Institute for the Rare Metal Industry (Moscovskiy gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut redkometallicheskoy promyshlennosti)

49
B

TITLE: Properties of liquid zirconium tetrachloride 27

SOURCE: Zhurnal fizicheskoy khimii, v. 39, no. 12, 1965, 3025-3032

TOPIC TAGS: zirconium compound, chloride, heat of vaporization, SURFACE TENSION

ABSTRACT: The zirconium tetrachloride used was the purest fraction, purified by rectification in a metallic packed column. The content of hafnium and other metallic impurities in the chloride was less than a hundredth of a percent. The temperature measurements were calibrated on zinc (m.p. 419.5°C) and were made with a Chromel-Alumel thermocouple using a type R2/1 semiautomatic potentiometer. Determination was first made of the temperature of the triple point; this was done from the cooling curve. Next, measurements were made of the pressure of the saturated vapors. Results are exhibited in tabular form. Measurements of the viscosity were made with a special viscometer (illustrated in the

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article). Finally, the surface tension was measured, and the results given in a table. Calculations were made of the critical pressure, the quasinormal boiling point, and the dependence of the heat of vaporization on the temperature. Orig. art. has: 10 formulas, 4 figures and 3 tables.

SUB CODE: /// SUBM DATE: 28Nov64/ ORIG REF: 009/ OTH REF: 010

ns

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

Sokolova, T. G.

PHASE I BOOK EXPLOITATION SOV/4726

Kiyev. Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut ugol'noy rudnoy, neftyanoy i gazovoy promyshlennosti

Nauchnyye zapiski, vyp. 1: Dobycha i pererabotka nefti (Scientific Reports of the State Scientific Research and Project Institute for the Coal, Mining, Oil and Gas Industries, No. 1: Extraction and Processing of Petroleum) Kiyev, 1960. 91 p. 1,000 copies printed.

Sponsoring Agencies: UkrSSR Gosudarstvennaya planovaya komissiya Soveta Ministrov; Gosudarstvennyy nauchno-issledovatel'skiy i proyektnyy institut ugol'noy, rudnoy, neftyanoy i gazovoy promyshlennosti "Ukrnilproyekt."

Editorial Council: V. P. Aksenov, S. Ye. Anushin, S. I. Balinskiy, V. Ya. Volchanskiy, D. I. Gol'tsev, V. S. Grinshteyn (Resp. Secretary), D. V. Dzhanovskiy, M. M. Zherbin (Chairman), A. F. Kotov, M. I. Logvinov, Yu. M. Ostrovskiy, L. M. Orzhekhovskaya, G. V. Prisedskiy, V. T. Sklyar (Deputy Chairman), N. Yu. Stasiy, and V. V. Tsaritsyn; Resp. Ed. for this Collection: V. T. Sklyar, Candidate of Chemical Sciences; Ed.: A. Novik.

Card 1/5

PURPOSE: This collection of articles is intended for petroleum researchers, engineers, and refiners.

COVERAGE: The collection of articles deals with the production and refining of petroleum. Individual articles discuss the effect of bound water on the depletion of petroleum deposits under dissolved gas conditions, the effect of pressure on the viscosity of degassified petroleum, the structure of high-molecular petroleum hydrocarbons, the asphaltene and tar components of Carpathian crudes and menilite shale asphalts, and the aliphatic composition of alcohols produced by selective hydrogenation of the CO and H_2 product of synthesis. Other articles describe the carbamide dewaxing method for filtrates of wax distillates, the production of flotation agents with the use of oxidized petroleum, and the investigation of six-membered aromatic and naphthenic hydrocarbons by means of infrared absorption spectra. The remaining articles are on the relations of pressure-volume-temperature-ethylene and on the phase equilibrium in ethylene-n-hexane, ethylene-cyclohexane, and ethylene-benzene systems. Specific volumes and compression coefficients at

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PETROLEUM REFINING

Sergiyenko, S. R., Ye. V. Lebedev, and A. A. Mikhnovskaya. On the Structure of High Molecular Hydrocarbons of Petroleum 13

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Sklyar, V. T., A. P. Lizogub, A. P. Mal'nev, and G. A. Puchkovskaya. Study of Six-Membered Aromatic and Naphthenic Hydrocarbons by Infrared Absorption Spectra 25

Sklyar, V. T., L. M. Santsova, T. G. Sokolova, and N. V. Aref'yev. Asphaltene and Tar Components of Some Carpathian Petroleums and Asphalts of Menilite Shales 30

Sablrova, G. V., G. M. Shapovalov, and V. N. Karaseva. Production of an Effective Flotation Agent Based on Oxidized Petrolatum 56

Zhurba, A. S., and T. P. Zhuze. Comparison of the Ethylene-n-Hexane, Ethylene-Cyclohexane, and Ethylene-Benzene Systems by the p-v-t-N [pressure-volume-temperature-molar fraction of ethylene in the mixture] Relations and Phase Equilibrium 68

Zhuze, T. P., and A. S. Zhurba. Specific Volumes and Compression Coefficients of the n-Hexane-Ethylene System in the Interval of Pressure to 150 atm and Temperature of 30-150°C 78

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, T.I.

USSR/Optics - Optical Engineering. K-4

Abs Jour : Referat Zhur - Fizika, No 3, 1957, 7649

Author : Sokolova, T.I.
Inst :
Title : Optics of Russian Microscopes and its Development.

Orig Pub : Vopr mikroskysii. M.-L., Mashgez, 1956, 4371

Abstract : Survey of the optical characteristics of microscope objectives in oculars, produced by the Russian industry. A large number of tables is given.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, T.I.; PLATONOV, M.P.

Biological microscopes in 1961. TSitologiia 3 no.3:345-357 My-Je '61. (MIRA 14:6)

1. Gosudarstvennyy opticheskiy institut, Leningrad.
(MICROSCOPE)

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SOKOLOVA, T.I.; TIUNOV, L.A.

Composition of diesel engine exhaust. Gig. i san. no.10:48
O '55. (MLRA 9:1)
(DIESEL ENGINES)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, T. I. (Leningrad)

Thiopental anesthesia in carbon tetrachloride poisoning. Farm. i toks. 27 no.1:28-32 Ja-F '64.

(MIRA 17:11)

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1ST AND 2ND ORDERS

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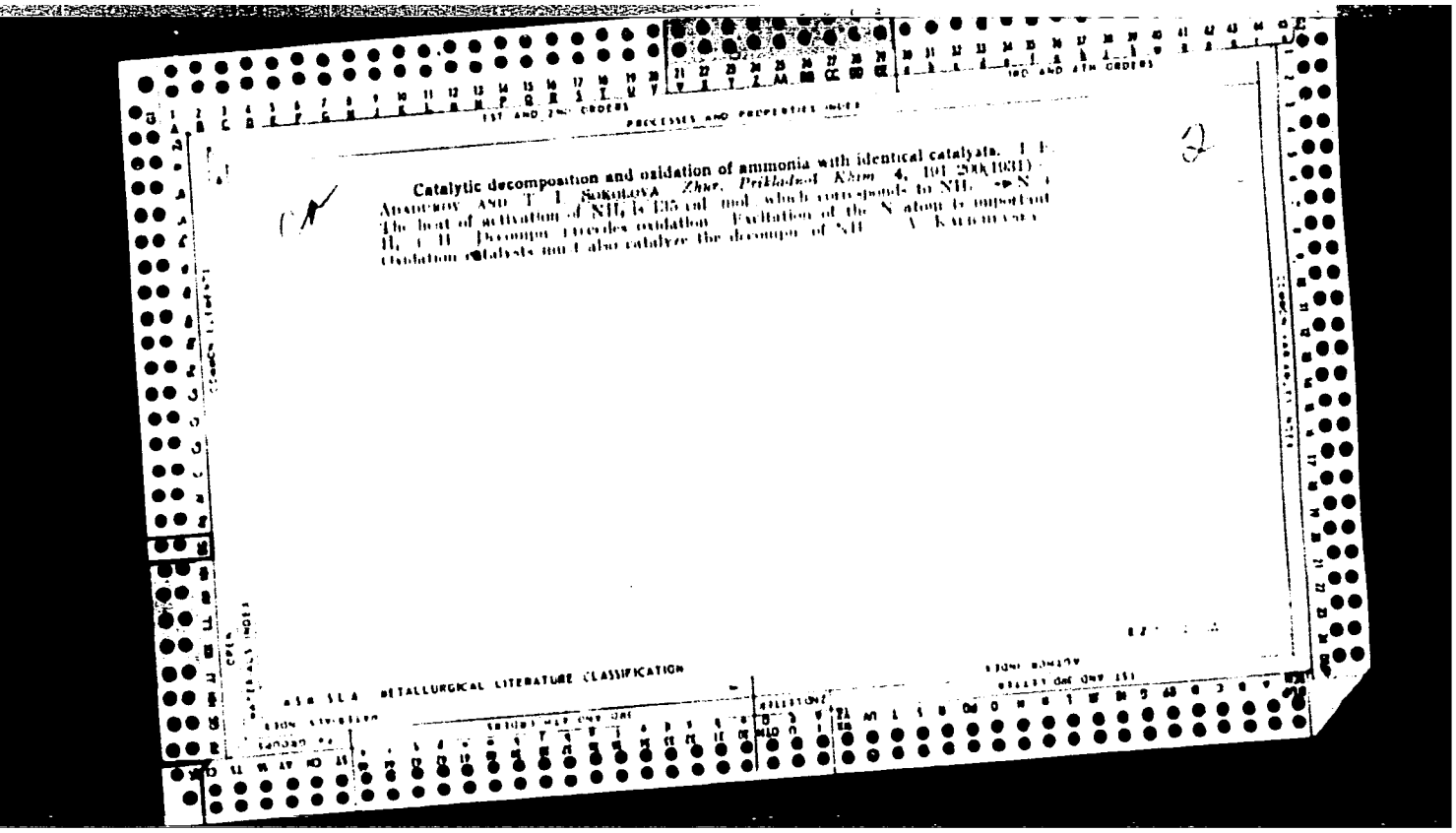
3RD AND 4TH ORDERS



Catalytic decomposition and oxidation of ammonia with identical catalysts. I. F. Abadurov and T. I. Sokolova. *Zhur. Prikladnoi Khim.* 4, 191-200(1931). The heat of activation of NH_3 is 135 cal./mol. which corresponds to $NH_3 \rightarrow N + H_2 + H$. Decompn. precedes oxidation. Excitation of the N atom is important. Oxidation catalysts must also catalyze the decompn. of NH_3. A. Kalichevsky

METALLURGICAL LITERATURE CLASSIFICATION

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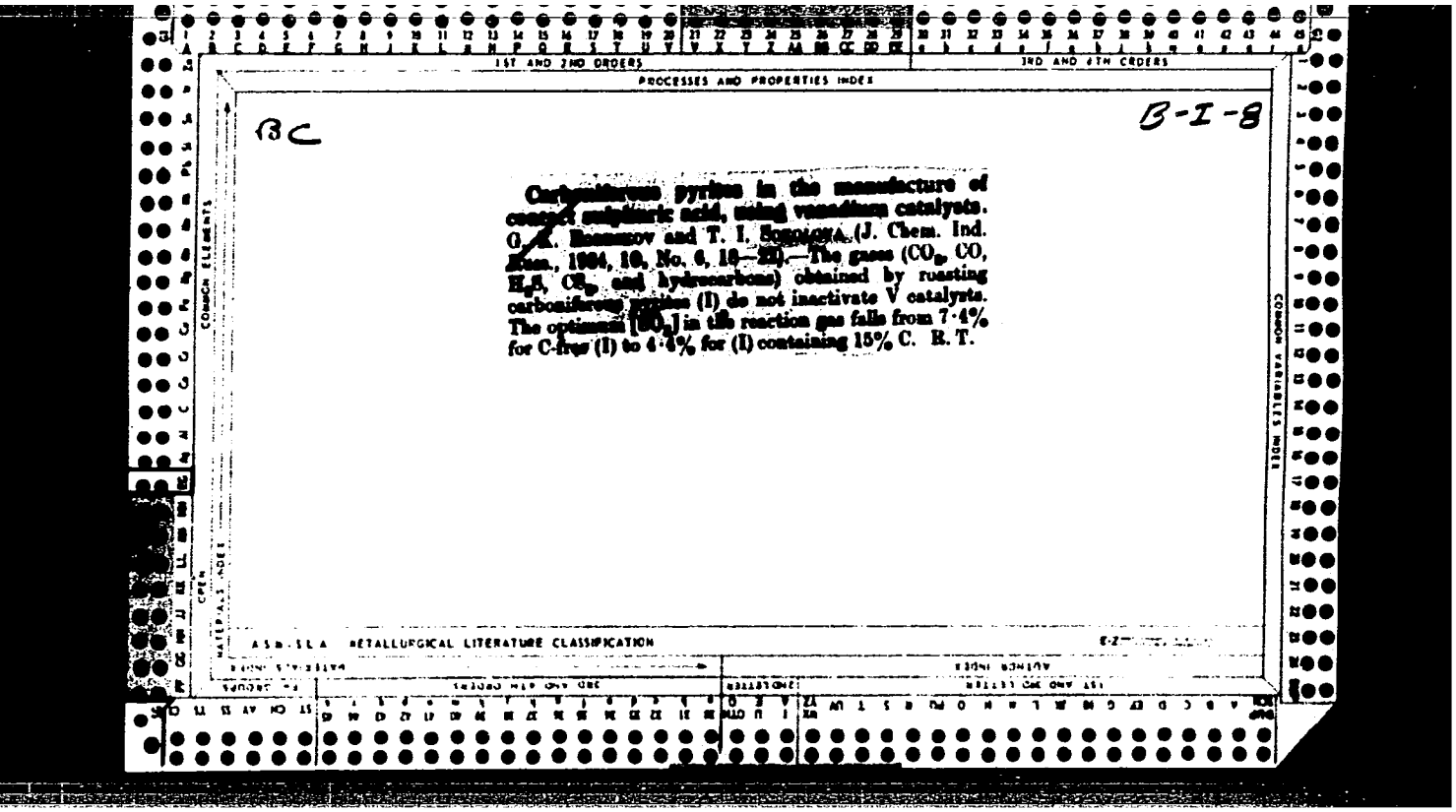

Carboniferous pyrites in the manufacture of contact sulphuric acid, using vanadium catalysts. G. K. Boreskov and T. I. Sokolova (J. Chem. Ind. Russ., 1934, 10, No. 6, 18—22).—The gases (CO_2, CO, H_2S, CS_2, and hydrocarbons) obtained by roasting carboniferous pyrites (I) do not inactivate V catalysts. The optimum [SO_2] in the reaction gas falls from 7·4% for C-free (I) to 4·4% for (I) containing 15% C. R. T.

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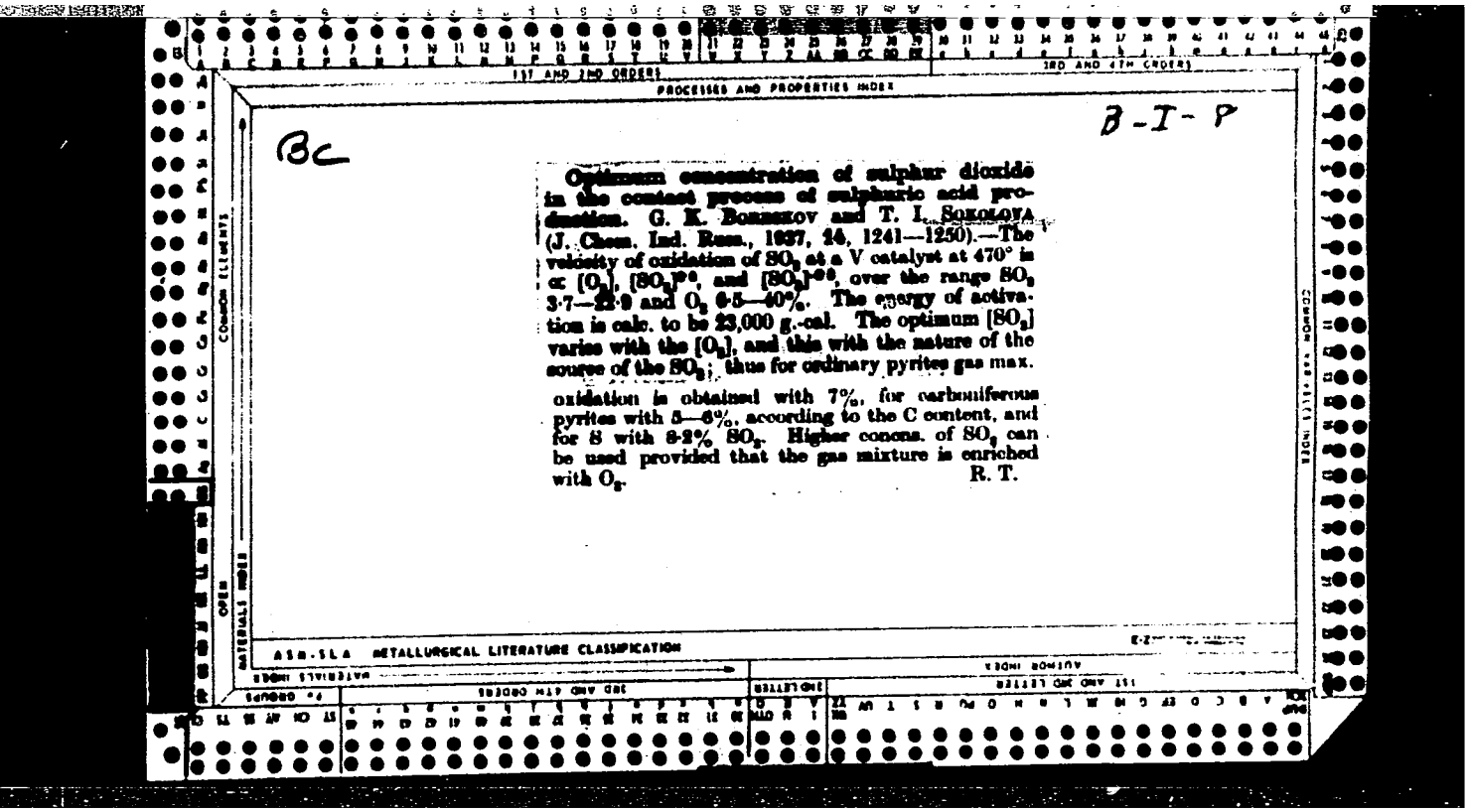
3RD AND 4TH ORDERS



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Bc

B-I-P

Optimum concentration of sulphur dioxide in the contact process of sulphuric acid production. G. K. Boreskov and T. I. Sokolova (J. Chem. Ind. Russ., 1937, 14, 1241—1250).—The velocity of oxidation of SO_2 at a V catalyst at 470° is $\propto [O_2]$, $[SO_2]^{0.6}$, and $[SO_3]^{-0.6}$, over the range SO_2 3·7—22·9 and O_2 6·5—40%. The energy of activation is calc. to be 23,000 g.-cal. The optimum $[SO_2]$ varies with the $[O_2]$, and this with the nature of the source of the SO_2; thus for ordinary pyrites gas max. oxidation is obtained with 7%, for carboniferous pyrites with 5—6%, according to the C content, and for S with 8·2% SO_2. Higher concns. of SO_2 can be used provided that the gas mixture is enriched with O_2. R. T.

COMMON ELEMENTS

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1ST AND 2ND LETTER

3RD AND 4TH ORDERS

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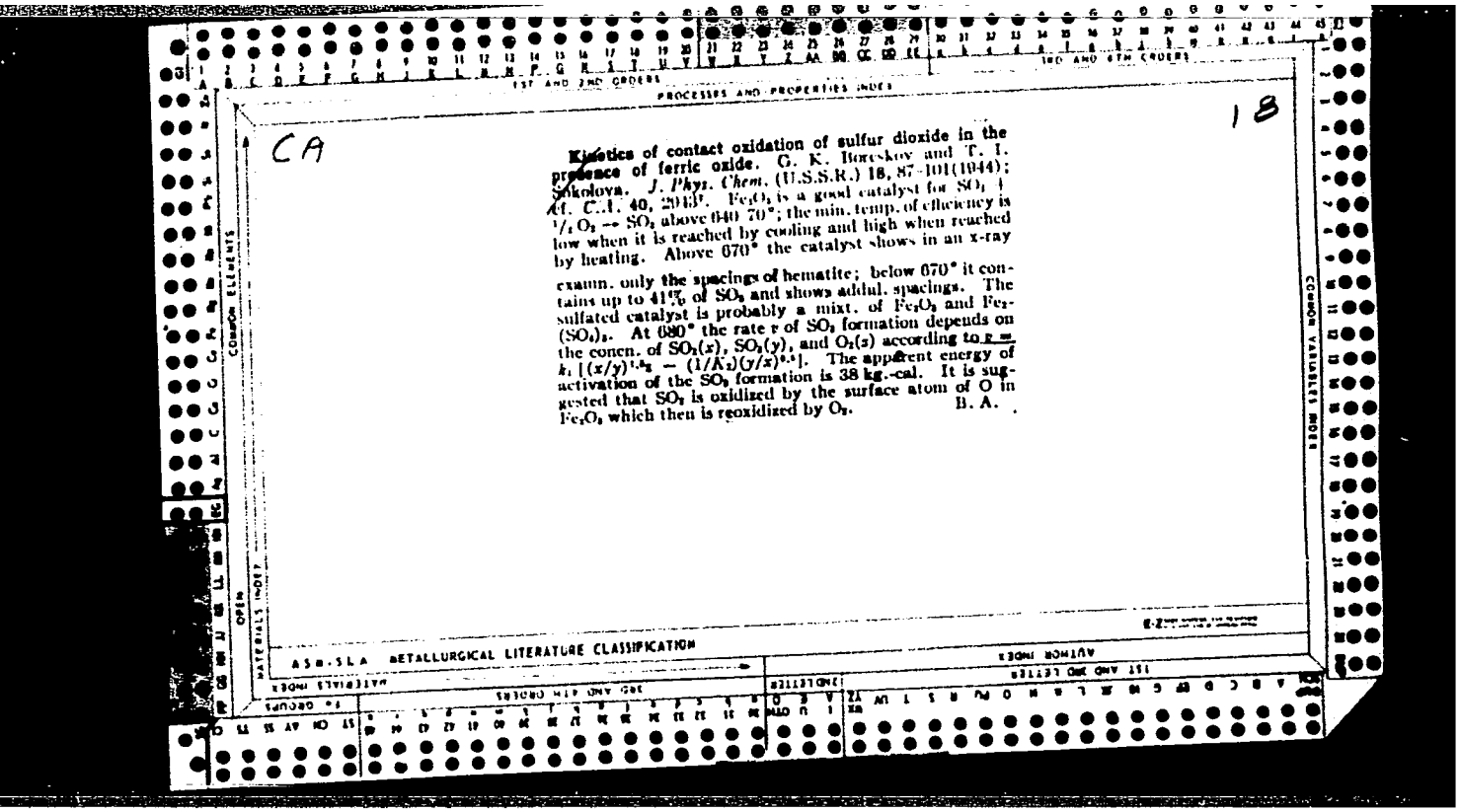

CA

18

Kinetics of contact oxidation of sulfur dioxide in the presence of ferric oxide. G. K. Boreskov and T. I. Sokolova. *J. Phys. Chem.* (U.S.S.R.) 18, 87–101(1944); cf. C.A. 40, 2013. Fe_2O_3 is a good catalyst for $SO_2 + \frac{1}{2}O_2 \rightarrow SO_3$ above 640 70°; the min. temp. of efficiency is low when it is reached by cooling and high when reached by heating. Above 670° the catalyst shows in an x-ray examn. only the spacings of hematite; below 670° it contains up to 41% of SO_3 and shows addnl. spacings. The sulfated catalyst is probably a mixt. of Fe_2O_3 and $Fe_2(SO_4)_3$. At 680° the rate r of SO_3 formation depends on the concn. of $SO_2(x)$, $SO_3(y)$, and $O_2(z)$ according to $r = k_1[(x/y)^{1.5}z - (1/K_2)(y/x)^{0.5}]$. The apparent energy of activation of the SO_3 formation is 38 kg.-cal. It is suggested that SO_2 is oxidized by the surface atom of O in Fe_2O_3 which then is reoxidized by O_2. B. A.

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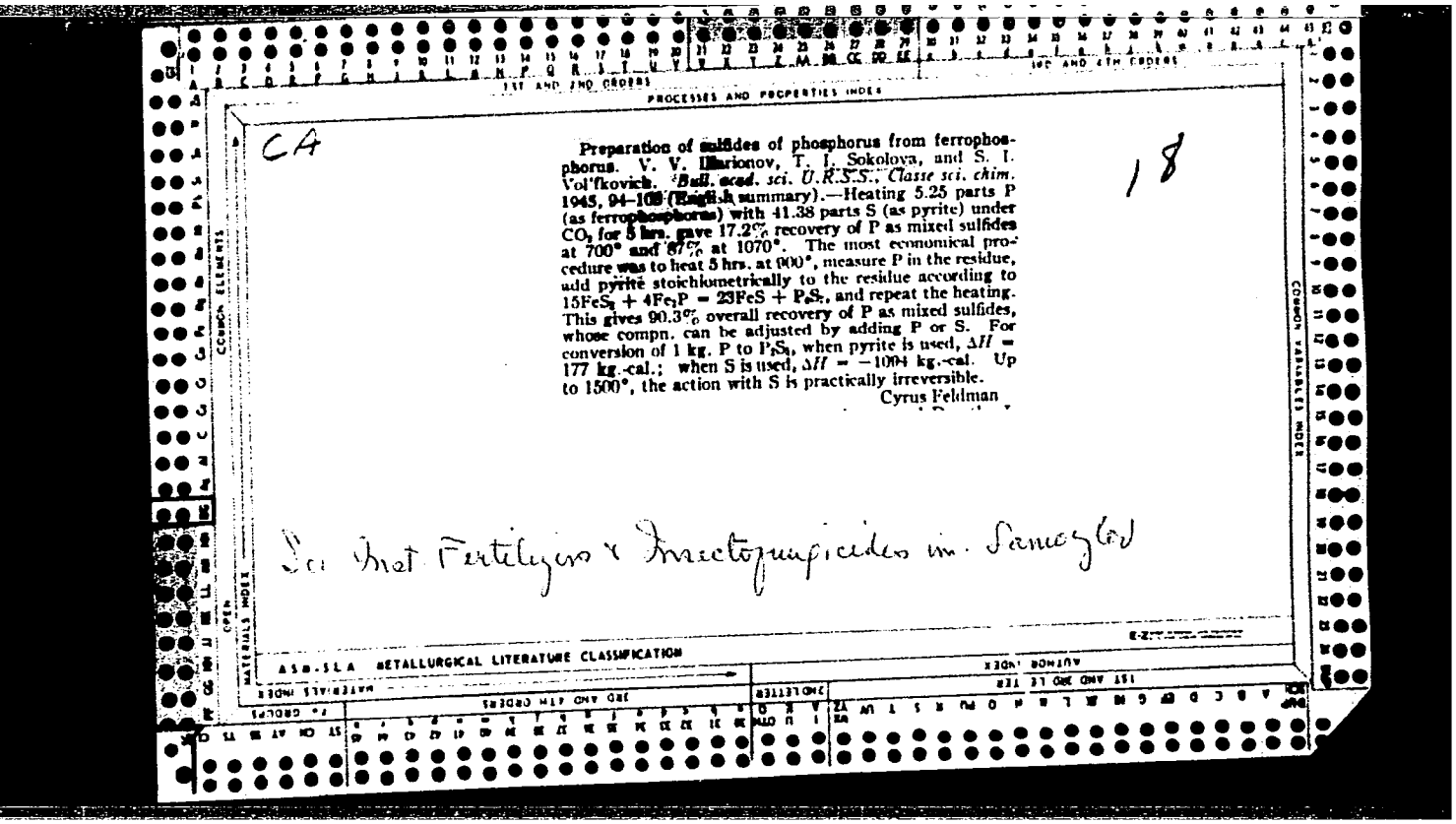
1ST AND 2ND ORDERS



PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

CA

18

Preparation of sulfides of phosphorus from ferrophosphorus. V. V. Illarionov, T. I. Sokolova, and S. I. Vol'fkovich. *Bull. acad. sci. U.R.S.S., Classe sci. chim.* 1945, 94-108 (English summary).—Heating 5.25 parts P (as ferrophosphorus) with 41.38 parts S (as pyrite) under CO_2 for 5 hrs. gave 17.2% recovery of P as mixed sulfides at 700° and 87% at 1070°. The most economical procedure was to heat 5 hrs. at 900°, measure P in the residue, add pyrite stoichiometrically to the residue according to $15FeS_2 + 4Fe_2P = 23FeS + P_4S_7$, and repeat the heating. This gives 90.3% overall recovery of P as mixed sulfides, whose compn. can be adjusted by adding P or S. For conversion of 1 kg. P to P_2S_5, when pyrite is used, ΔH = 177 kg.-cal.; when S is used, ΔH = −1094 kg.-cal. Up to 1500°, the action with S is practically irreversible.

Cyrus Feldman

Sci. Inst. Fertilizers & Insectopungicides im. Samoylov

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ILLARIONOV, V.V.; SOKOLOVA, T.I.

Study of the decomposition of solid solutions of the system phosphorus - sulfur. Izv.Sekt.fiz.-khim.anal. 21:153-158 '52. (MLRA 6:8)

1. Nauchnyy institut po udobreniyam i insektofungisidam imeni Ya.V.Samoylova. (Solutions, Solid) (Phosphorus) (Sulfur)

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T. I. Sokolova

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6

The system $BiCl_3 + 3Ag \rightleftharpoons 3AgCl + Bi$. T. I. Sokolova (N. S. Kurnakov Inst. Gen. Inorg. Chem., Acad. Sci. U.S.S.R., Moscow). *Izvest. Sektora Fiz.-Khim. Anal., Inst. Obshchei Neorg. Khim., Akad. Nauk S.S.S.R.* 21, 150–71 (1952).—This system was studied by thermal analysis and microstructure analysis. The diagonal cuts AgCl-Bi and $BiCl_3$-Ag of the trapezoid part of the diagram show reaction products on both these lines; this indicates that the system is at least partly reversible. There was less interaction along the line AgCl-Bi; this fact indicates that this is the more stable diagonal. The diagrams show the presence of 2 eutectics, one in the system $BiCl_3$–BiCl–AgCl and the other in BiCl–AgCl–Bi. The location of still another eutectic in $BiCl_3$–BiCl–Ag was hard to ascertain. On the diagram there is a large area of layer sepn. and 2 one-phase areas. Within the latter are the fields where Bi, BiCl, Ag, AgCl, and $BiCl_3$ sep. In the area of layer sepn. the following phases crystd.: (1) Ag in the lower layer and AgCl in the upper, (2) a eutectic alloy of Bi and BiCl in the lower and BiCl in the upper layer, and (3) a eutectic of Bi and Ag in the lower layer and AgCl in the upper. With a view of removal of Bi in Pb refining it is pointed out that the chlorides and the metals formed in this reaction combine very little in the molten state. The best yield of Bi is obtained with an excess of $BiCl_3$ near the diagonal AgCl-Bi. The max. purity of Bi is 95 at. %. In the system $BiCl_3$–Bi was found an unstable compd., BiCl, which decomposes into Bi and $BiCl_3$.

M. Hosch

NF

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USSR/Chemistry - Pharmaceuticals Sep 52

"Synthesis and Study of the Gamma-diethylamino-propyl Ether of 2-Methoxy-6-allylphenol," A. M. Khaletskiy, T. I. Sokolova, Leningrad Chem-Phar Inst

"Zhur Obshch Khim" Vol 22, No 9, pp 1648-1650

The gamma-diethylaminopropyl ether of 2-methoxy-6-allylpherol, as well as its hydrochloride were prepd from 2-methoxy-6-allylphenol and 1-diethylamino-3-chloropropane. A salt was prepd from the above ether and 1,5-disulfonic acid of naphthalene.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

USSR/Chemistry - Phosphorus Compounds Jun 52

"Separation of a Mixture of $POCl_3$ and PCl_3," T. I. Sokolova, V. V. Illarionov, S. I. Vol'fkovich

"Zhur Prik Khim" Vol XXV, No 6, pp 652-657

It is shown that values expressing the dependence of partial pressures on the compn of the PCl_3-$POCl_3$ mixt, as derived for the purpose of plotting the isotherm of partial pressures of the system, satisfy the Duheme [?] eq and allow calcn of the Duheme-Margulis const. On the basis of the data obtained,

218T37

USSR/Chemistry - Phosphorus (Contd) Jun 52

the dependence of the compn of the vapor phase on the compn of the liquid phase can be plotted. It can be considered, with sufficient accuracy, as an isobaric function.

218T37

SOKOLOVA, T. I.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, T. I.

2.A.-V-48
Jan 10, 1954
Synthetic Resins
and Plastics

The toxicity of the heat-insulating plastic prepared from urea and formaldehyde. V. V. Andreev and T. I. Sokolova. *Farmakol. i Toksikol.* 16, No. 4, 45–7(1953).—The heat-insulating plastic (I) prepd. from HCHO and urea (as a tar) is porous. I is prepd. in plates (sp. gr. 0.03) and crumbs, which break easily but do not burn. At 180–200°, I is carbonized and decompd. to form gases. A complete decompn. takes place at 400–500°. On an open flame the decompn. is quick and complete. Among the formed gases HCN is found, the presence of which was detected by absorbing the gases with a dil. alkali with the formation of Prussian blue. When 1 kg. of the plastic is burned 4,738 g. HCN is formed. Burning 0.15 g. plastic causes the death of mice after 1–2 min. (0.71 mg. HCN is produced). L. Goldenberg

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

ANDREYEV, V.V.; SOKOLOVA, T.I.

Toxicity of heat-insulating plastic with a formaldehyde and urea base. Farm.i toks. 16 no.4:45-47 Jl-Ag '54. (MLRA 7:5)
(Hydrogen cyanide-toxicology) (Plastic materials)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

TIUNOV, L.A.; SOKOLOVA, T.I.; PARIBOK, V.P.

Rate of carbon monoxide excretion from the body [with summary in English]. Farm. i toks. 20 no.4:76-78 Jl-Ag '57. (MIRA 10:11)
(CARBON MONOXIDE, metabolism,
excretion rate (Rus))

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

VOL'FKOVICH, S.I.; SOKOLOVA, T.I.; KULAGINA-SMIRNOVA, Z.G.; KNYAZEVA, K.P.

Carbonization process for production of cryolite from fluorosilicate gases. Zhur. prikl.khim. 31 no.7:969-976 Jl '58. (MIRA 11:9)
(Cryolite) (Fluorosilicate)

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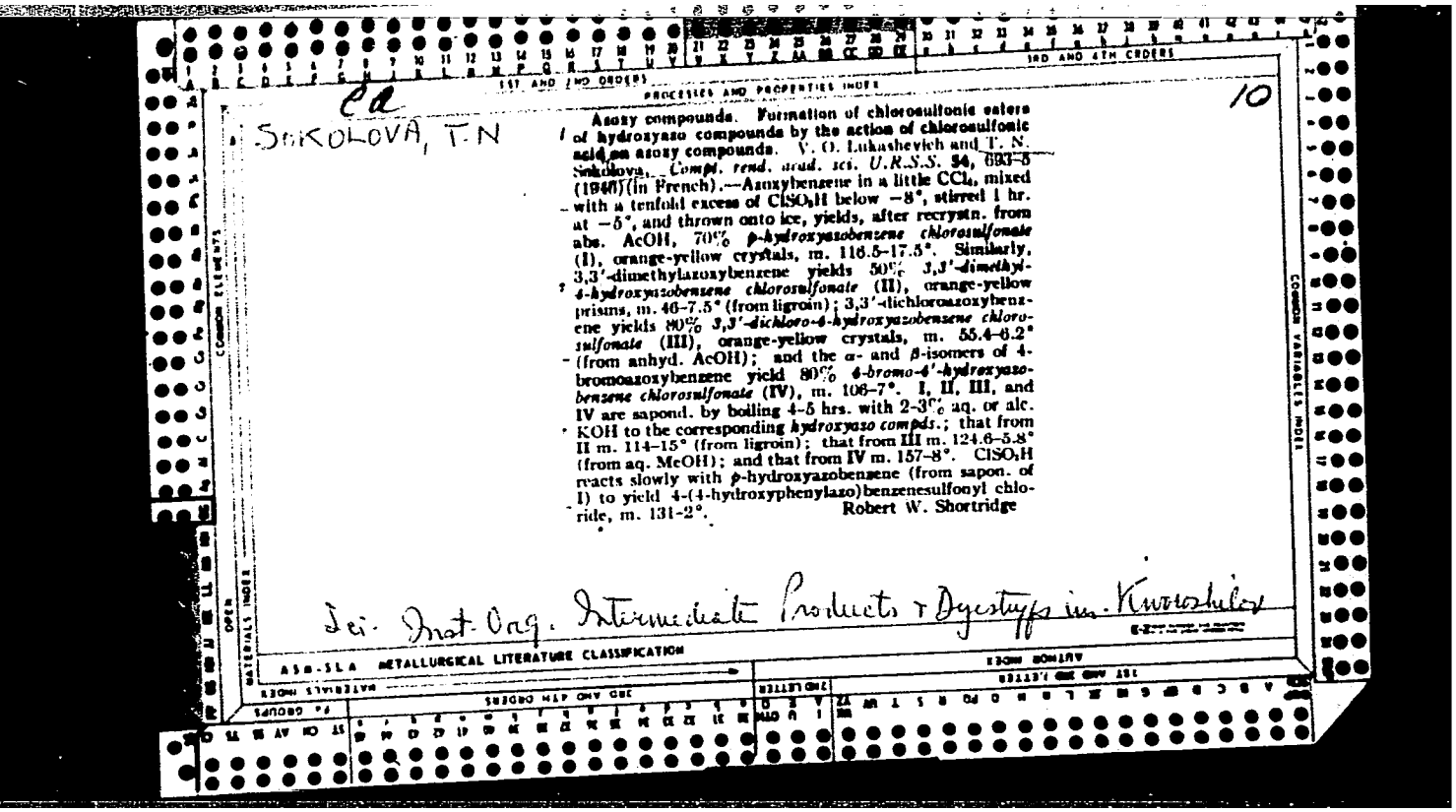

1ST AND 2ND ORDERS

PROCESSES AND PROPERTIES INDEX

3RD AND 4TH ORDERS

Ca

SOKOLOVA, T.N

10

Azoxy compounds. Formation of chlorosulfonic esters of hydroxyazo compounds by the action of chlorosulfonic acid on azoxy compounds. V. O. Lukashevich and T. N. Sokolova. *Compt. rend. acad. sci. U.R.S.S.* **54**, 693-5 (1946) (in French).—Azoxybenzene in a little CCl_4, mixed with a tenfold excess of $ClSO_3H$ below −8°, stirred 1 hr. at −5°, and thrown onto ice, yields, after recrystn. from abs. AcOH, 70% *p-hydroxyazobenzene chlorosulfonate* (I), orange-yellow crystals, m. 116.5–17.5°. Similarly, 3,3'-dimethylazoxybenzene yields 50% *3,3'-dimethyl-4-hydroxyazobenzene chlorosulfonate* (II), orange-yellow prisms, m. 46–7.5° (from ligroin); 3,3'-dichloroazoxybenzene yields 80% *3,3'-dichloro-4-hydroxyazobenzene chlorosulfonate* (III), orange-yellow crystals, m. 55.4–6.2° (from anhyd. AcOH); and the α- and β-isomers of 4-bromoazoxybenzene yield 80% *4-bromo-4'-hydroxyazobenzene chlorosulfonate* (IV), m. 106–7°. I, II, III, and IV are sapond. by boiling 4–5 hrs. with 2–3% aq. or alc. KOH to the corresponding *hydroxyazo compds.*; that from II m. 114–15° (from ligroin); that from III m. 124.6–5.8° (from aq. MeOH); and that from IV m. 157–8°. $ClSO_3H$ reacts slowly with *p*-hydroxyazobenzene (from sapon. of I) to yield 4-(4-hydroxyphenylazo)benzenesulfonyl chloride, m. 131–2°.

Robert W. Shortridge

Sci. Inst. Org. Intermediate Products & Dyestuffs im. Kworoshilov

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SOKOLOVA, T.N., dotsent

Clinical aspects and diagnosis of odontogenic inflammatory processes in the facial vein system. Stomatologiia 38 no.3: 50-54 My-Je '59. (MIRA 12:8)

1. Iz stomatologicheskoy kliniki (zav. - prof.I.M.Starobinskiy) I Moskovskogo meditsinskogo instituta imeni I.M.Sechenova.
(FACIAL VEIN--DISEASES) (TEETH--DISEASES)

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GORBUNOVA, Z.V.; SOKOLOVA, T.N.

Syphilitic aneurysm of the aorta with external rupture. Klin. med. 38 no.6:147-149 Je '60. (MIRA 13:12)
(AORTIC ANEURYSMS) (SYPHILIS)

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Sokolov, I. N.

47

PHASE I BOOK EXPLOITATION SOV/6333

Bochkarev, V. V., ed.

Tekhnika izmereniye radioaktivnykh preparatov; sbornik statey (Techniques for the Measurement of Radioactive Preparations; Collection of Articles) Moscow, Gosatomizdat, 1962. 4600 copies printed.

Eds.: A. M. Smirnova and M. A. Smirnov; Tech. Ed.: S. M. Popova.

PURPOSE: This book is intended for specialists in nuclear instrumentation.

COVERAGE: The book is a collection of articles on recent developments in 1) measurement of the activity and 2) analysis of the composition of emissions of radioactive preparations. The methodology and apparatus used in these studies are described in detail. References are given at the end of each article.

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Techniques for the Measurement (Cont.) SOV/6333

Pigoreva, N. S., Ye. G. Solodovnikova, and V. V. Fokin. Preparation of Samples for Measurement of the Activity of Certain Compounds Labeled With C^{14} and H^3 Isotopes 67

Golutvina, M. M., and M. A. L'vova. Preparation of Specimens for Measurement of the Activity From β-Emission 72

Levochkin, F. K. Measurement of the Activity of Thick β-Sources 83

Kononenko, A. M., V. A. Petrov, and V. Ye. Yakhontova. Dose Distribution Along the Axis of a β-Emitting Plane Disk 100

Bazhenov, V. A., V. V. Bochkarev, and T. N. Sokolova, Measurement of the Activity of Gaseous Preparations by Means of a Gas-Filled Counter 115

Turkin, A. D. Radiometry of β-Emitting Gases by Means of End-Window Counters 124

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BOCHKAREV, V.V.; KRONGAUZ,A.N.; SOKOLOVA,T.N.; TIMOFEYEV,L.V.

Determination of the dose of radiation from β-applicators.
Med.rad. 8 no.2:66-73 F'63 (MIRA 16:11)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

S/115/63/000/002/008/008
E194/E155

AUTHORS: Bazhenov, V.A., Bochkarev, V.V., and Sokolova, T.N.

TITLE: Sorption effects in measuring the radioactivity of gases

PERIODICAL: Izmeritel'naya tekhnika, no.2, 1963, 57-59

TEXT: In measuring the radioactivity of gases with gas-filled radiation counters, the absorption of β-radiation by the walls and end-effects cause errors which have both been thoroughly discussed, particularly in the non-Soviet literature. However, there are also two sorption effects: some of the material becomes firmly attached to the walls and remains there after the chamber has been nominally swept free; and some becomes temporarily attached to the walls during measurements, so disturbing them, but is afterwards released and swept out, so that the effect cannot be directly observed. Tests were made to determine the relative importances of these effects. A chamber, filled with a gas tagged with a source of β-radiation, has a thin mica window in one end over which is placed an end counter. The chamber also contains a layer of material of such a thickness as to absorb β-particles of maximum energy.

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Then if this layer is placed next to the window without breaking vacuum, the counter records only β-particles from substances attached to the inner surface of the mica and to the surface of the layer. It can be confirmed that radiation originating in the gas filling of the chamber is not being counted by withdrawing the layer and inserting an analogous layer between the mica window and the counter. This gives the background level. After sweeping the chamber, the background contamination due to irreversible sorption can be determined. The actual experimental chamber, made of duralumin, was 178 mm long and 50 mm diameter with a window of 1 cm^2. A disk with 12 positions could be placed at various distances in front of the window so that the material of the layer could be altered without breaking vacuum or changing the gas. The gas used was CS_2 tagged with S^{35} with a specific activity of 25 milliCurie per gram of liquid carbon disulphide. Surface sorption was studied on the following materials: teflon, mica, special lubricant for CS_2, brass, aluminium, methylmethacrylate, polished and unpolished ebonite, rubber mastic and sheet vacuum-rubber. The experimental procedures are described in some detail. The materials were found to fall into two groups: the first

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instantaneously acquire a certain surface activity which then increases exponentially with time (PVC, ebonite, methylmethacrylate). The other group includes the remaining materials except the rubber mastic, in which surface activity instantaneously reaches a certain value which then remains constant. The relative sorptions of samples of the different substances, i.e. the percentage of the radioactivity picked up by 1 cm^2 of the given surface to the activity of 1 cm^3 of the chamber was: teflon 5; mica 5; brass 6.5; aluminium foil 6.5; methylmethacrylate 13; PVC 28; polished ebonite 30; rubber mastic 39; rubber 45; unpolished ebonite 65. For materials of the first group the calculation is made for an exposure time of 26 hours. From these data it is possible to assess the sorption of CS_2 in particular experimental equipment. Thus the activity of CS_2 sorbed on the walls of the measuring chamber filled with radioactive carbon disulphide was directly measured. A large proportion of the sorption was reversible and so is not revealed by background measurements after cleaning. The sorption effects are very considerable, and differ for different materials. There are 4 figures.

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BOTVINKINA, L.N.; SELIVERSTOV, V.A.; SOKOLOVA, T.N.; YABLOKOV, V.S.

Some genetic types of Tatarian red beds in the Ural Mountain region of Orenburg Province. Izv. AN SSSR.Ser.geol. 28 no.5:47-66 My '63. (MIRA 17:4)

1. Geologicheskiy institut AN SSSR, Moskva.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, T.N.; SAKOVA, T.V.; KONSTANTINOV, N.N., doktor biol. nauk, red.[deceased]

[Photoperiodism of plants; bibliography of the literature for 1940-1963] Fotoperiodizm rastenii; bibliograficheskii ukazatel' literatury 1940-1963 gg. Moskva, Nauka, 1965. 364 p. (MIRA 18:10)

1. Moscow. Glavnyy botanicheskiy sad. Nauchnaya biblioteka.

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SOKOLOVA, T.N.

Phlebitis as a complication in purulent processes of the maxillofacial region. Trudy 1-go MMI 44:119-126 '65. (MIRA 18:12)

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L 09154-67 EWT(m)
ACC NR: AP7002769

SOURCE CODE: UR/0089/66/021/002/0141/0142

AUTHOR: Bazhenov, V. A.; Bochkarev, V. V.; Golubev, Yu. M.; Levin, I. V.; Sokolova, T. N.; Turkin, A. D.

15

ORG: none

TITLE: Measurements of activity of radioactive gases by means of spherical ionization chamber

17

SOURCE: Atomnaya energiya, v. 21, no. 2, 1966, 141-142

TOPIC TAGS: ionization chamber, radioactivity measurement

ABSTRACT: A spherical, 24-cm ionization chamber with a copper barrier, filled with air under atmospheric pressure and operating in the -spectrum energy range (0.15 to 2.20 Mev) was used for measuring the gas activity in experiments with ^{133}Xe, CO_2 (labeled with ^{14}C), ^{131}Xe, ^{85}Kr, and ^{41}Ar gases. The gas activity was determined by means of compensation counters. The order of error was about 2.5%. The results showed that only ^{14}C, ^{85}Kr, and ^{41}Ar with simple spectra could be used, while ^{133}Xe and ^{131}Xe, with their conversion electrons, could not be used. The average current magnitudes $\underline{K}$ per particle in the chamber were correlated with the theoretical values and the results agreed within 25 to 30%. Orig. art. has: 1 figure and 1 table. [NA]

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GEL'PERIN, N.I.; PEBALK, V.L.; ROZOV, V.N.; ZAMYSHLYAYEV, V.G.; SOKOLOVA, T.O.; MILOVANOVA, I.B.; YEPISHEVA, M.S.

Fractional reextraction of metals from complex metal soaps. TSvet.met. 38 no.10:41-49 O '65. (MIRA 18:12)

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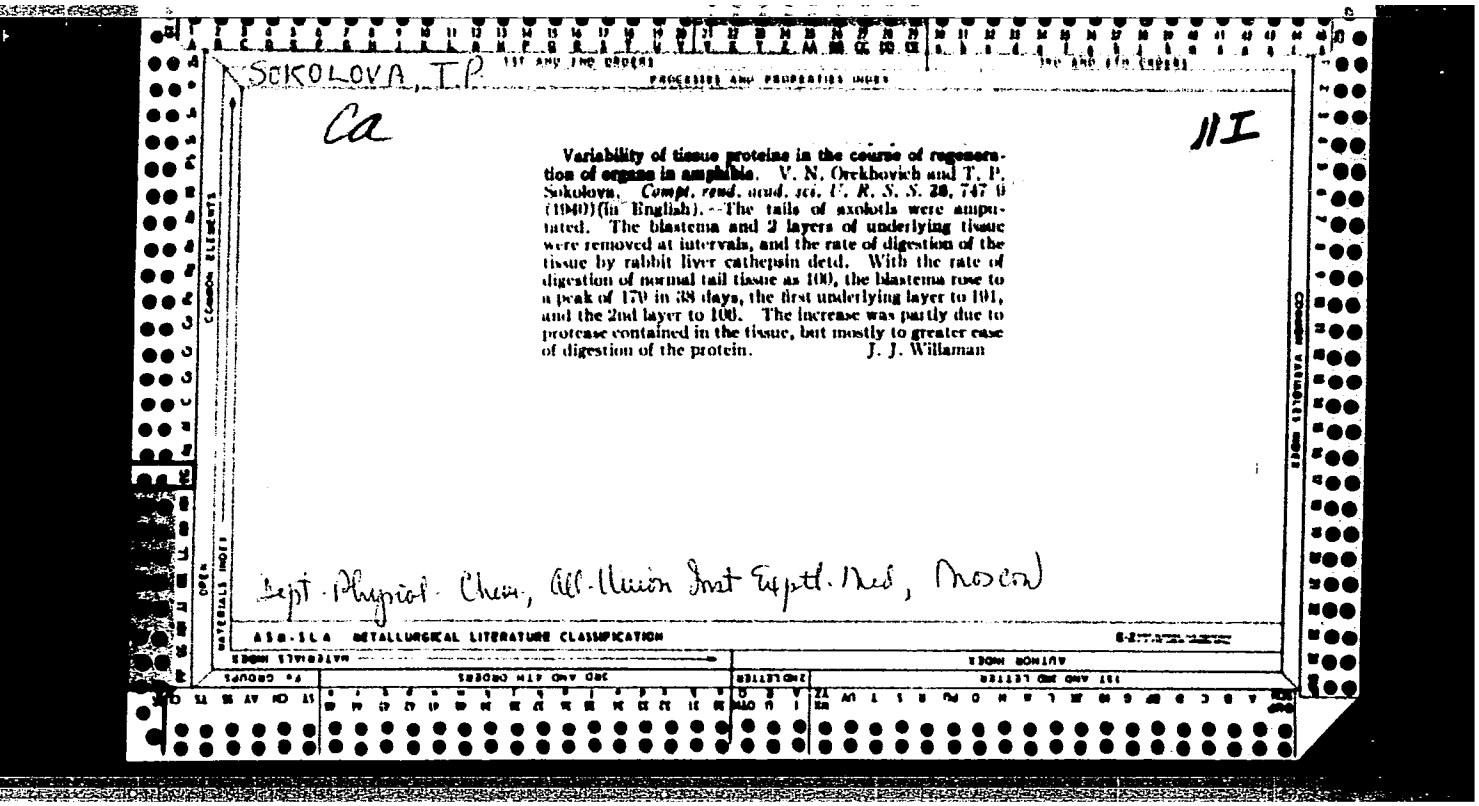

SOKOLOVA, T.P.

Ca

III

Variability of tissue proteins in the course of regeneration of organs in amphibia. V. N. Orekhovich and T. P. Sokolova. *Compt. rend. acad. sci. U. R. S. S.* **28**, 747-9 (1940)(In English).--The tails of axolotls were amputated. The blastema and 2 layers of underlying tissue were removed at intervals, and the rate of digestion of the tissue by rabbit liver cathepsin detd. With the rate of digestion of normal tail tissue as 100, the blastema rose to a peak of 170 in 38 days, the first underlying layer to 101, and the 2nd layer to 100. The increase was partly due to protease contained in the tissue, but mostly to greater ease of digestion of the protein. J. J. Willaman

Dept. Physiol. Chem., All-Union Inst. Exptl. Med., Moscow

ASM-SLA METALLURGICAL LITERATURE CLASSIFICATION

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Sokolova, T. P.

Some phosphorus fractions of the blood and organs of sheep in brucellosis. T. P. Sokolova. *Trudy Nosokherkas. Zoovet. Inst.* 1956, No. 9, 102-8; *Referat. Zhur., Khim., Biol. Khim.* 1957, No. 4025.—The blood content of P was notably increased in sheep infected with brucellosis; it reached its max. (up to 7.5 mg.% on the av.) towards the end of the second month after the infection; it then receded and on the 4th month returned to its normal level. The adenosinetriphosphate blood content of brucella-infected sheep did not vary from that of normal.

B. S. Levine

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

: USSR M

: CULTIVATED PLANTS. Grains. Leguminous Grains. Tropical Cereals.

: Ref Zhur - BIOLOGIYA NO. 4, 1959, No. 15621

: Sokolova, T.P.; Zarif'yan, A.T.

: Novocherkassk Zooveterinary Inst.

: The Dynamics of Accumulation of Nutrients with Various Fertilizers and Irrigation.

: V. sb.: Kul'tura kukuruzy v SSSR. M., "Sov. nauka", 1957, 21-24

: Findings of the Novocherkasskaya Zooveterinary Institute in studying the accumulation of water-soluble carbohydrates, starch, nitrogenous substances in the green mass and kernel of corn of three sorts: Groznenskiy krug, Novo-ukrainka and Sterling in conditions of irrigation and with various fertilizers (manure 10 tons/ hectare and P_2 1 centner/hectare).

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SOKOLOVA, T.S.

Review of O.D.Sokolova-Ponomareva's and V.P.Bisiarina's "Practical handbook on pharmacotherapy for pediatricians." Vest. AMN SSSR no.1:47-48 Ja-Mr '53. (MLRA 6:7)

(Drugs) (Pediatrics) (Sokolova-Ponomareva, O.D.) (Bisiarina, V.P.)

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SOKOLOVA, T.S.

Early diagnosis of dysentery in children. Fel'dsher & akush. no.8: 34-39 Aug 1953. (CLML 25:1)

1. Moscow.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, T. S.

"Disturbances in the Secretory Function of the Pancreas during Lingering and Chronic Dysentery in Children." Cand Med Sci, Acad Med Sci USSR, Moscow, 1954. (KL, No 7, Feb 55)

SO: Sum. No. 631, 26 Aug 55 - Survey of Scientific and Technical Dissertation Defended at USSR Higher Educational Institutions (14)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, T.S., kand.med.nauk; LIBERMAN, I.S., red.; BUL'DYAYEV, N.A., tekhn.red.

[How to prevent gastrointestinal diseases in children] Kak predupredit' zheludochno-kishechnye zabolevaniia u detei. Moskva, Gos.izd-vo med.lit-ry, 1958. 13 p. (MIRA 13:3)
(DIARRHEA)

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TSOPPI, Yelizaveta Ernestovna; SOKOLOVA, Tat'yana Sergeyevna; POTAPOVA, I.N., red.; ZAKHAROVA, A.I., tekhn.red.

[Work of the visiting nurse] Rabota patronazhnoi sestry. Moskva, Gos.izd-vo med.lit-ry, 1959. 91 p. (MIRA 13:5)
(NURSES AND NURSING) (INFANTS--CARE AND HYGIENE)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, T.S., kand.med.nauk

Causes of anorexia in young children and measures for their correction [with summary in English]. Pediatriia 37 no.3:16-22 Mr '59. (MIRA 12:4)

1. Ia kliniki rannego detskogo vozrasta (zav. - prof. I.V. TSimbler) Instituta pediatrii AMN SSSR (dir. - chlen-korrespondent AMN SSSR prof. O.D. Sokolova-Ponomareva).

(APPETITE DISORDERS, in inf. & child
causes of anorexia & correction in young children (Rus))

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SOKOLOVA, T.S., kand.med.nauk

"Annales paediatriae fenniae." Vol.3, 1957: Anniversary volume in honor of Professor Arvo Ilppo's seventieth birthday. Reviewed by T.S. Sokolova. Pediatriia 37 no.3:78-81 Mr '59. (MIRA 12:4)
(PEDIATRICS)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

DOMBROVSKAYA, Yu.F., prof. otv. red.; ZVYAGINTSEVA. S.G., prof. red.; SOKOLOVA, T.S., prof., red., GAMBURG, R.L., prof., red.

[Current problems of the physiology and pathology of childhood] Sovremennye problemy fiziologii i patologii detskogo vozrasta. Moskva, Meditsina, 1965. 317 p. (MIRA 18:6)

1. Deystvitel'nyy chlen AMN SSSR (for Dombrovskaya).

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MEYSEL', M.N.; POMOSHCHNIKOVA, N.A.; SOKOLOVA, T.S.

Radiation resistance of cells as affected by blocking intracellular structures. Dokl. AN SSSR 117 no.1:142-145 N-D '57. (MIRA 11:3)

1. Institut mikrobiologii AN SSSR. Predstavleno akademikom V.N. Shaposhnikovym.
(YEAST) (PLANTS, EFFECT OF RADIOACTIVITY ON)
(CELL METABOLISM)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

POMOSHCHNIKOVA, N.A.; SOKOLOVA, T.S.

Radiosensitive links in the system of cellular oxidation-reduction enzymes bound with mitochondria. Radiobiologiia 1 no.2:200-205 '61. (MIRA 14:7)

1. Institut mikrobiologii AN SSSR, Moskva.
(GAMMA RAYS—PHYSIOLOGICAL EFFECT)
(OXIDATION-REDUCTION REACTION) (MITOCHONDRIA)

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AKKERMAN, V.V.; TUKACHINSKIY, S.Ye.; TEODOROVICH, V.I.; CHERNOMORDIK, B.L.; MOISEYEVA, V.P.; LUGANOVA, I.S.; SHULUTKO, L.S.; KURALEVA, V.V.; SOKOLOVA, T.S.

Some morphological and functional properties of the blood in patients with essential polycythemia. Probl.gemat.i perel. krovi 6 no.4:30-33 Ap '61. (MIRA 14:6)

1. Iz Leningradskogo ordena Trudovogo Krasnogo Znameni nauchno-issledovatel'skogo instituta perelivaniya krovi (dir. - dotsent A.D. Belyakov, nauchnyy rukovoditel' - chlen-korrespondent AMN SSSR prof. A.N. Filatov).
(POLYCYTHEMIA) (BLOOD)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

TUKACHINSKIY, S.Ye.; KLIMOVA, K.N.; MOISEYEVA, V.P.; SOKOLOVA, T.S.; KUZNETSOVA, V.N.; LOKTEV, A.F.

Mechanism of the formation of C-reactive protein. Probl. gemat. i perel. krovi 9 no.7:14-18 Jl '64. (MIRA 18:3)

1. Leningradskiy institut perelivaniya krovi (dir. - dotsent A.Ye. Belyakov).

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SOKOLOVA, T.V. (Moskva)

Diuretic effect of diacarb. Klin.med. 37 no.2:134-138 F '59.
(MIRA 12:3)

1. Iz terapevticheskogo otdeleniya (nauchnyy rukovoditel' - prof. B.B. Kogan) Klinicheskoy bol'nitsy imeni Medsantrud (glavnyy vrach A.P. Timofeyeva).
(ACETAZOLAMIDE, ther. use,
(Rus))

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KOGAN, B.B., prof.; SOKOLOVA, T.V. (Moskva)

Therapeutic effectiveness and the mechanism of action of euphylline in cardiac insufficiency. Klin.med. 38 no.10:80-87 O '60. (MIRA 13:11)

1. Iz filiala (zav. - prof. B.B. Kogan) gospital'noy terapevticheskoy kliniki I Moskovskogo ordena Lenina meditsinskogo instituta imeni I.M. Sechenova na baze klinicheskoj bol'nitsy imeni Medsantrud.

(AMINOPHYLLINE) (HEART FAILURE)

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NIKIFOROV, Yu.N., inzhener, laureat Stalinskoy premii; SOKOLOVA, T.Ye., inzhener.

Gluing metal to wood impregnated with an oil repellent. Trudy TSNIS MPS no.9:175-178 '53. (MLRA 8:1)
(Gluing) (Woodwork)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, T.Ye., inzhener.

Gluing wood impregnated with salt solutions. Trudy TSNIS MPS no.9:197-198 '53. (MLRA 8:1)
(Gluing) (Woodwork)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, T.Ye., inzh.; TIMOFEYEVA, O.G., inzh.

Strengthening particle boards. Stroi. mat. 5 no.10:35-36 O '59.
(MIRA 13:2)

(Wood, Compressed)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

CZECHOSLOVAKIA

NITRO, A., [redacted], VIGAS, M., SOKOLOVA, V; Endocrinological Institute, Slovak Academy of Sciences (Endokrinologicky Ustav SAV), Bratislava.

"Study of Morphological Changes in Adrenal Cortex of Rats Subjected to Thyroidectomy Under Influence of an Acute Trauma."

Prague, Ceskoslovenska Fysiologie, Vol 15, No 2, Feb 66, p 100

Abstract: 10 days after thyroidectomy, animals subjected to an [illegible] acute trauma show changes in adrenal cortex when compared to normal animals; the content of corticosterone in the plasma is reduced. Changes in the distribution of fat in the adrenal glands between the animals that underwent the operation and control animals are described. These differences may be due to the suppression of the adrenocorticotropic function of the anterior lobe of the hypophysis due to the changed thyrotropic reaction after thyrodectomy. No references. Submitted at "16 Days of Physiology" at Kosice, 29 Sep 65.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, V.A., kandidat tekhnicheskikh nauk; KRYLOV, V.I., inzhener, redaktor; GOLOVIN, S.Ya., inzhener, zav. redaktsiyey; MATVEYEVA, Ye.N., tekhnicheskiy redaktor.

[Oil-less foundry sand binders] Bezmaslianye liteinye krepiteli. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. lit-ry, 1954. 89 p. [Microfilm] (MLRA 8:2)
(Sand, Foundry) (Foundry machinery and supplies)

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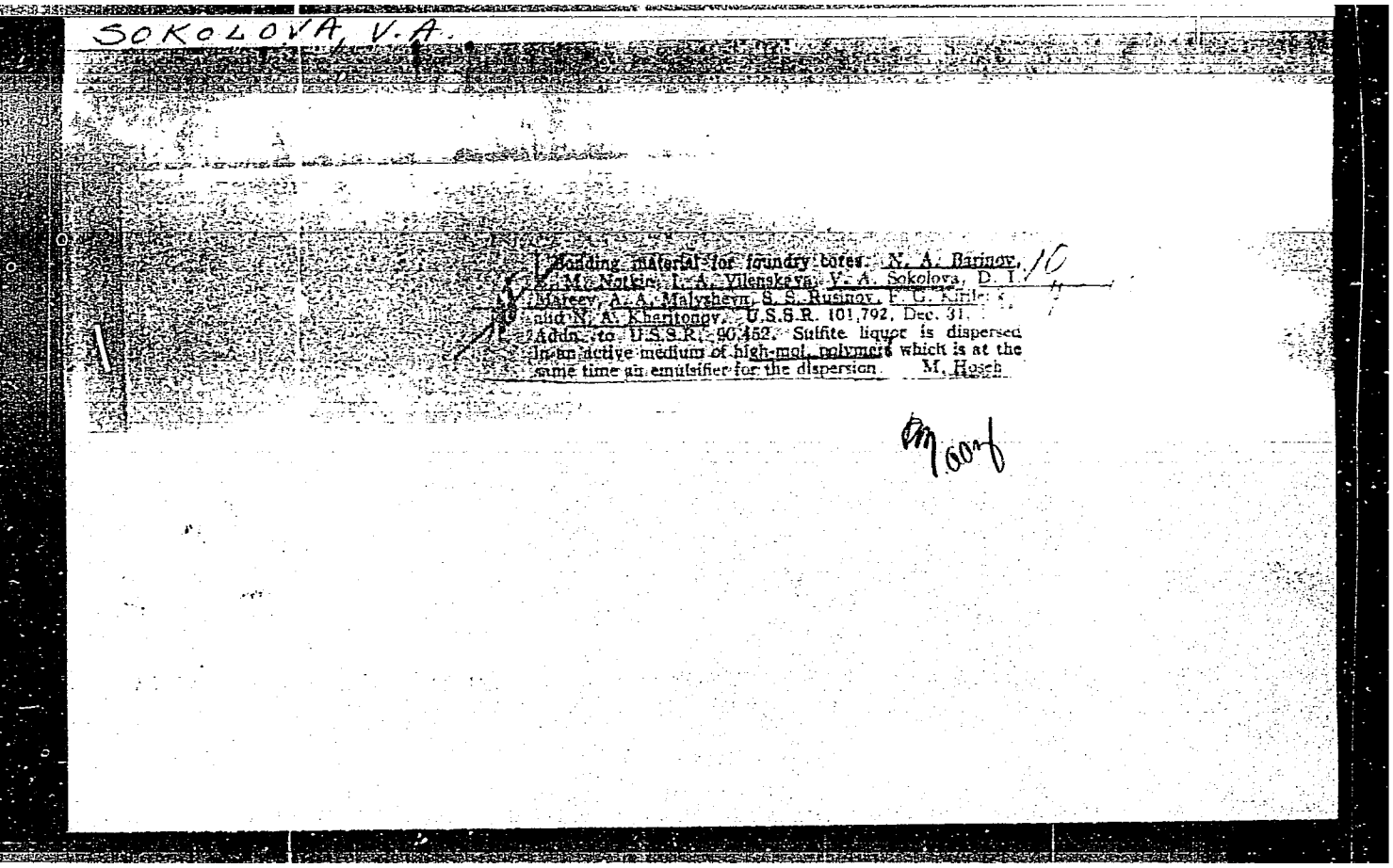

SOKOLOVA, V.A.

Bonding material for foundry cores. N. A. Barinov, E. M. Notkin, I. A. Vilenskaya, V. A. Sokolova, D. I. Mareev, A. A. Malyshevn, S. S. Rusinov, F. G. Kirilenko and N. A. Kharitonov. U.S.S.R. 101,792, Dec. 31. Addn. to U.S.S.R. 90,452. Sulfite liquor is dispersed in an active medium of high-mol. polymers which is at the same time an emulsifier for the dispersion. M. Hosch

10

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, V.A.; ROMANENKO, V.V.

Using wood pitch in foundry practice. Gidroliz.i lesokhim.prom. 9 no.5:10-12 '56. (MLRA 9:11)

1. Nauchno-issledovatel'skiy institut liteynogo mashinostroyeniya (for Sokolova), TSentral'nyy nauchno-issledovatel'skiy leso-khimicheskiy institut (for Romanenko).
(Wood tar) (Foundry machinery and supplies)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, V.A.

Use of rapid hardening binders for quick manufacture of molds and cores. Lit.proizv. no.9:26-30 S '57. (MIRA 10:10)
(Founding) (Coremaking) (Binding materials)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, V.A.

Program for calculating precise positions of minor planets with an electronic computer. Izv. GAO 23 no.4:196-197 '64. (MIRA 17:9)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

KISELEVA, T.P.; KOROLEVA, L.S.; SOKOLOVA, V.A.

Exact positions of minor planets computed from photographic observations at Cape Observatory. Biul. Inst. teor. astron. 10 no.1:76-80 '65. (MIRA 18:12)

1. Submitted May 9, 1964.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

VALOV, P.M.; SOKOLOVA, V.K.; VILENSKIY, A.G.; VAYNSHTEYN, E.Ye.

Unit for measuring Mössbauer spectra. Prib. i tekh.eksp. 10 no.5:161-163 S-O '65. (MIRA 19:1)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN SSSR, Novosibirsk. Submitted August 22, 1964.

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

ACC NR: AP7001365 (A) SOURCE CODE: UR/0413/66/000/021/0032/0032

INVENTOR: Gus'kov, A. K.; Bobkov, S. S.; Gribov, A. M.; Kolchin, I. K.; Zhakov, V. A.; Kovalev, N. I.; Lisunova, M. B.; Sokolova, V. A.; Kuznetsova, S. N.; Butusova, V. A.

ORG: none

TITLE: Preparative method for a catalyst. Class 12, No. 187738

SOURCE: Izobreteniya, promyshlennyye obraztsy, tovarnyye znaki, no. 21, 1966, 32

TOPIC TAGS: acrytonitrile, chemical synthesis, catalyst preparation, catalysis

ABSTRACT: An Author Certificate has been issued for a preparative method for a catalyst for the synthesis of acrylonitrile by oxidative ammonolysis of propylene. A carrier with improved strength and heat resistance is prepared by molding, drying and heating to 1200—1250 a mixture of Kaolin and α-alumina. The carrier is subsequently impregnated with bismuth, molybdenum, and phosphorus compounds. [BO]

SUB CODE: 07/ SUBM DATE: 01Apr64/ ATD PRESS: 5109

Card 1/1 UDC: 66.097.373

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

L 10943-67 EWT(l)/EWT(m)/EWP(t)/ETI IJP(c) JD/JW
ACC NR: AP7000538 SOURCE CODE: UR/0386/66/004/010/0409/0413

27
25

AUTHOR: Markevich, L. A.; Sokolova, Ye. S.

ORG: State Institute of Nitrogen Industry (Gosudarstvennyy institut azotnoy promyshlennosti)

TITLE: Gas-liquid coexistence curve for sulfur hexafluoride near its critical point

SOURCE: Zhurnal eksperimental'noy i teoreticheskoy fiziki. Pis'ma v redaktsiyu. Prilozheniye, v. 4, no. 10, 1966, 409-413

TOPIC TAGS: critical point, critical pressure, phase transition, sulfur compound, fluoride, phase diagram

ABSTRACT: In connection with numerous recent attempts to determine the shape of the coexistence curve near the critical point, the authors obtained exact data on the gas-liquid equilibrium of specially purified (99.995% or better) SF_6 in the temperature interval $T_{cr} - T \approx 0.001 - 0.800C$. The investigations were made with previously-described apparatus (Zh. Fiz. khimii v. 40, 264, 1966), which was improved to increase the experimental accuracy. The absolute temperature, the temperature of the vanishing of one of the phases, the volume, and the critical molar volume were measured accurate to 0.002C, 0.002C, ±0.05% and ± 0.2% respectively. The value obtained by the authors for the critical temperature, pressure, and molarvolume are 45.560 ± 0.005, 38.328 ± 0.005, and 198.0 ± 0.4, respectively. The results show that the coexistence curve of SF_6 is given in the interval $T_{cr} - T \approx 0.000 - 0.050C$ by the equation $T - T_{cr} = \alpha(v - v_{cr})$. On going beyond 0.050C from the critical point, the curve

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changes smoothly to form $T - T_{cr} = \beta(v - v_{cr})^3$, and retains this form up to $T_{cr} - T \simeq 0.5C$. It is concluded that to obtain a single equation for the coexistence curve near the critical point it is necessary to take into account higher terms in the series of the function $(\partial p/\partial v)_T$, a task beyond the scope of this investigation. The authors thank I. R. Krichevskiy and G. D. Yefremova for interest and advice. Orig. art. has: 2 figures and 1 table.

SUB CODE: 20/ SUBM DATE: 29Aug66/ ORIG REF: 005/ OTH REF: 008

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

KHARITONOV, N.A.; SOKOLOVA, V.A.; NADEZHINA, A.M., tekhn. red.

[Using new oil-free binders for core mixtures in foundry practice] Primenenie novykh bezmaslianykh krepitelei dlia sterzhnevykh smesei v liteinom proizvodstve; po materialam TsNIIL Glavformomaterial MM i P. Leningrad, Leningr. dom tekhniki mashinostroeniia, 1949. 21 p. (MIRA 16:8)

(Binding materials) (Coremaking)

APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2"

"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

3L988
S/190/62/004/003/008/023
B110/B144

57830

AUTHORS: Razuvayev, G. A., Ryabov, A. V., Zhil'tsov, S. F., Sokolova, V. A., Voskoboynik, G. A.

TITLE: Initiation of vinyl polymerization by organomercury compounds

PERIODICAL: Vysokomolekulyarnyye soyedineniya, v. 4, no. 3, 1962, 371-375

TEXT: On the basis of M. M. Koton's investigations (Dokl. AN SSSR, 88, 991, 1953) the effect of oxygen on the polymerization of methyl methacrylate (I) and acrylonitrile is studied at 30-50°C in the presence of dicyclohexyl mercury (II), diisopropyl mercury (III), diethyl mercury (IV) and diphenyl mercury (V), cyclohexyl mercury chloride (VI) and phenyl mercury chloride (VII). The polymerization rate increases with the temperature. The compounds do not dissociate at 30 and 50°C. II and III decompose rapidly at room temperature in the presence of small oxygen amounts. Unstable peroxide compounds which initiate the polymerization, are formed from oxygen and II and III. With stable V and mercury chlorides, oxygen has an inhibiting effect. Its increase first accelerates then decelerates polymerization owing to the decomposition of organometallic

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compounds and to the inhibiting effect of oxygen. Increase in oxygen pressure reduces the molecular weight to a constant value. Maximum conversion corresponds to constant minimum molecular weight and probably also to a maximum content of radicals formed. $r_1 = 0.8$, $r_2 = 0.9$ holds for 6 hrs copolymerization of styrene and I at 50°C initiated by 0.3 mole% of II, and in 14 hrs copolymerization of acrylonitrile and I at 30°C initiated by 0.3 mole% of III. Since these relative activities are similar to those of free radical copolymerization, II and III cause free radical polymerization. In the absence of O_2, hydroquinone additions of 50-500 mole% of the initiator reduced the conversion degree of I from 12 to 2-5%, and the molecular weight from 1,500,000 to 300,000. An induction period of 5.5 hrs was found in the polymerization with IV in air. There are 3 figures and 4 tables. The most important reference to English-language publications reads as follows: F. M. Lewis, F. R. Mayo, W. F. Hulse, J. Amer. Chem. Soc., 67, 1701, 1945.

ASSOCIATION: Nauchno-issledovatel'skiy institut khimii pri Gor'kovskom gosudarstvennom universitete im. N. I. Lobachevskogo (Scientific Chemical Research Institute of the Gor'kiy State University imeni N. I. Lobachevskiy)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, V. A.

"Rapidly Drying Emulsions of Sulfite Liquor as Binding Materials". V Sb.: Formovochnyye Materialy, Mashgiz, M., pp 94-105, 1954.

Sulfite liquor dispersed in a hydrophobic medium is used as a basic material in preparing casting molds and foundry cores. Oxidized petrolatum, heavy fractions of shale gas generator tar. and vat residues from terpentine are used as emulsifiers. (RZhKhim, No 4, 1955)

SO: Sum No 884, 9 Apr 1956

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, V.A.; ROGOVIN, Z.A.

Effect of the molecular weight and polydispersity of acetylcellulose on the conditions of forming and on the properties of acetate fiber. Khim.volok. no.5:45-47 '59. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (VNIIV) i Moskovskiy tekstil'nyy institut (MTI).
(Rayon) (Cellulose acetate)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

KANTER, D.TS.; USHAKOVA, A.N.; SOKOLOVA, V.A.

Waterless combing oil preparation for treating acetate silk. Khim.-volok. no.6:44-46 '61. (MIRA 14:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna.

(Rayon)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, V. A.

USSR/Chemistry - Propylene Oxide Jul 53

"Some Physical-Chemical Properties of Propylene Oxide," P. V. Zimakov and V. A. Sokolova

Zhur Fiz Khim, Vol 27, No 7, pp 1079-1080

Remeasured density, refractive index, and viscosity of propylene oxide and detd its limits of miscibility in water with greater accuracy. Found that propylene oxide forms the cryst hydrate $C_3H_6O \cdot 16H_2O$, m p -3°, under proper conditions.

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

Sokolova, V.A.

KOVEL'MAN, G.A.; SOKOLOVA, V.A.

Rapid drying of hollow porcelain articles by infrared rays. Trudy GIKI no.1:10-23 '56. (MIRA 11:5)
(Pottery) (Infrared rays--Industrial applicat ons)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, V.A., aspirant

Repairing malocclusion caused by destruction of the permanent first molar teeth during childhood. Stomatologiia 36 no.1:59-64 Ja-F '57. (MIRA 11:1)

1. Iz kafedry chelyustno-litsevoy khirurgii i stomatologii (zav. - prof. N.M.Mikhel'son) TSentral'nogo instituta usovershenstvovaniya vrachey (dir. V.P.Lebedeva) i TSentral'nogo instituta travmatologii (dir. - chlen-korrespondent AMN SSSR prof. N.N.Priorov)
(TEETH--ABNORMITIES AND DEFORMITIES)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

S/035/62/000/002/005/052
A001/A101

AUTHOR: Sokolova, V. A.

TITLE: Precise positions of asteroids according to photographic observations at the Cape Observatory

PERIODICAL: Referativnyy zhurnal, Astronomiya i Geodeziya, no. 2, 1962, 18, abstract 2A173 ("Tr. Gl. astron. observ v Pulkove", 1961, v. 73, 147-155, English summary)

TEXT: The author presents the results of processing [α, δ (1950,0), O-C] of photographic observations of asteroids. The observations were carried out at the Cape of Good Hope Observatory during 1956 - 1957 with a wide-angle camera of the Victoria triple refractor and Ilford Zenith plates (16 x 16 cm, scale 102".354 in 1 mm). The following asteroids were observed: 1, 2, 3, 4, 6, 7, 18, 40. The list of fundamental stars and "relationships" is given.

L. N.

[Abstracter's note: Complete translation]

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FLOROVSKAYA, Vera Nikolayevna. SOKOLOVA, V.A., prof., red.; SHILOVA, K.A., red.; GEORGIYEVA, G.I., tekhn.red.

[Fluorescence bituminological method in petroleum geology] Liuminestsentno-bituminologicheskii metod v neftianoi geologii. [Moskva] Izd-vo Mosk. univ., 1957. 290 p. (MIRA 11:5)
(Petroleum geology)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

STEPANOVA, Ye.A.; SOKOLOVA, V.A.

[Publications of the Institute of Geography of the Academy of Sciences of the U.S.S.R., 1918-1958; a bibliography] Izdaniia Instituta geografii Akademii nauk SSSR, 1918-1958; bibliograficheskii ukazatel'. Sost. E.A.Stepanova i V.A. Sokolova. Moskva, 1959. 168 p. (MIRA 15:3)

1. Akademiya nauk SSSR. Institut geografii. Biblioteka.
(Bibliography--Geography)

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"APPROVED FOR RELEASE: 08/25/2000 CIA-RDP86-00513R001652120002-2

SOKOLOVA, V.A.

Repeated advance of the steppe in the southern part of Ryazan Province. Bot. zhur. 46 no.4:561-562 Ap '61. (MIRA 14:3)

1. Moskovskiy gosudarstvennyy universitet.
(Krasivka region (Ryazan Province))—Steppe flora)

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